

IN THE SPECIFICATION

- (1) Insert the following paragraph at page 1, line 13:

This application incorporates by reference the contents of a 133 kb text file created on September 2, 2009 and named “SN10571882_sequence_listing.txt,” which is the sequence listing for this application.

- (2) Amend the paragraph spanning pages 7 and 8 as follows:

Figures 2A-2E ~~depict~~ ~~depicts~~ an alignment of Env polypeptides from various HIV isolates (Type B-SF162 (SEQ ID NO:2), subtype C-TV1.8_2 (SEQ ID NO:3), subtype C-TV1.8_5 (SEQ ID NO:4), subtype C-TV2.12-5/1 (SEQ ID NO:5), subtype C-MJ4 (SEQ ID NO:6), India subtype C-93IN101 (SEQ ID NO:7), subtype A-Q2317 (SEQ ID NO:8), subtype D-92UG001 (SEQ ID NO:9), subtype E-cm235 (SEQ ID NO:10), and a Consensus Sequence (SEQ ID NO:11)). The arrows indicate exemplary regions for deletions and/or truncations in the beta and/or bridging sheet region(s). The “*” denotes N-linked glycosylation sites, one or more of which can be modified (e.g., deleted and/or mutated; one such possible mutation is mutation (N--> Q)).

- (3) Amend paragraph 4 on page 8 as follows:

Figure 6 presents the nucleotide sequence of the polynucleotide designated gp140.modSF162.delV2 (SEQ ID NO:12).

(4) Amend paragraph 5 on page 8 as follows:

Figure 7 presents the nucleotide sequence of the polynucleotide designated gp140.mut7.modSF162.delV2 (SEQ ID NO:13).

(5) Amend paragraph 6 on page 8 as follows:

Figure 8 presents the nucleotide sequence of the polynucleotide designated gp140mod.TV1.delV2 (SEQ ID NO:14).

(6) Amend paragraph 7 on page 8 as follows:

Figure 9 presents the nucleotide sequence of the polynucleotide designated gp140mod.TV1.mut7.delV2 (SEQ ID NO:15).

(7) Amend paragraph 8 on page 8 as follows:

Figure 10 presents the nucleotide sequence of the polynucleotide designated gp160mod.Q23-17 (SEQ ID NO:16) (optimized sequence based on subtype A HIV-1 isolate Q23-17 from Kenya GenBank Accession AF004885).

(8) Amend paragraph 9 on page 8 as follows:

Figure 11 presents the nucleotide sequence of the polynucleotide designated gp160mod.98UA0116 (SEQ ID NO:17) (optimized sequence based on subtype A HIV-1 isolate 98UA0116 from Ukraine GenBank Accession AF413987).

(9) Amend paragraph 10 on page 8 as follows:

Figure 12 presents the nucleotide sequence of the polynucleotide designated gp160mod.SE8538 (SEQ ID NO:18) (optimized sequence based on subtype A HIV-1 isolate SE8538 from Tanzania GenBank Accession AF069669).

(10) Amend the paragraph spanning pages 8 and 9 as follows:

Figure 13 presents the nucleotide sequence of the polynucleotide designated gp160mod.UG031 (SEQ ID NO:19) (optimized sequence based on subtype A Human immunodeficiency virus 1 proviral DNA, complete genome, clone:pUG031-AI GenBank Accession AB098330).

(11) Amend paragraph 1 on page 9 as follows:

Figure 14 presents the nucleotide sequence of the polynucleotide designated gp160mod.92UG001 (SEQ ID NO:20) (optimized sequence based on subtype D Human immunodeficiency virus type 1 complete proviral genome, strain 92UG001 GenBank Accession AJ320484).

(12) Amend paragraph 2 on page 9 as follows:

Figure 15 presents the nucleotide sequence of the polynucleotide designated gp160mod.94UG114 (SEQ ID NO:21) (optimized sequence based on subtype D HIV-1 isolate 94UG114 from Uganda GenBank Accession U88824).

(13) Amend paragraph 3 on page 9 as follows:

Figure 16 presents the nucleotide sequence of the polynucleotide designated gp160mod.ELI (SEQ ID NO:22) (optimized sequence based on subtype D Human immunodeficiency virus type 1, isolate ELIGenBank Accession K03454).

(14) Amend paragraph 4 on page 9 as follows:

Figure 17 presents the nucleotide sequence of the polynucleotide designated gp160mod.931N101 (SEQ ID NO:23) (optimized sequence based on Indian subtype C Human immunodeficiency virus type 1 subtype C genomic RNA GenBank Accession AB023804).

(15) Amend paragraph 5 on page 9 as follows:

Figure 18 presents the nucleotide sequence of the polynucleotide designated gp160mod.cm235.V3con (SEQ ID NO:24) (optimized sequence based on subtype E HIV-1 isolate).

(16) Amend paragraph 6 on page 9 as follows:

Figure 19 presents the nucleotide sequence of the polynucleotide designated gp160partialmod.cm235.V3 con (SEQ ID NO:25) (optimized sequence based on subtype E HIV-1 isolate).